

Practice

For use with pages 125–129

Solve the equation. Check your solution.

1. $10 + 3(x + 2) = 31$

2. $-2(x - 6) + 7 = 35$

3. $-20 - (4x - 1) = -15$

4. $12(x + 3) - 3x = 117$

5. $-25 + 4(2x + 5) = -61$

6. $187 = 19 + 7(13 - x)$

7. $20 = 14 + 3(x + 8)$

8. $-5(2x - 7) + 24 = 89$

9. $-14 = 6x - 8(x + 3)$

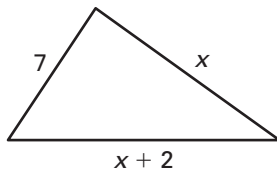
10. $-7x - (10 - x) = -58$

11. $48 = 15 + 6(4 + x) - 3x$

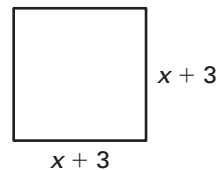
12. $23 - 7(x + 3) + 5x = 10$

Find the value of x for the given triangle, rectangle, or square.

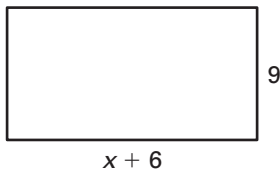
13. Perimeter = 29 units



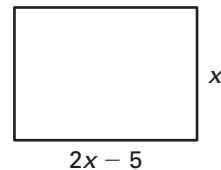
14. Perimeter = 28 units



15. Perimeter = 52 units



16. Perimeter = 38 units



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- 17.** The length of a rectangle is 3 meters more than twice its width. The perimeter of the rectangle is 48 meters. Let w represent the width.
- Sketch a diagram of the rectangle.
 - Write an equation for the perimeter of the rectangle.
 - Find the length and width of the rectangle.
- 18.** A class of 42 students and 2 teachers plan a trip to an observatory. The class has raised \$485 for the trip. Admission is \$5 per person and bus rental is \$230. With the remaining money, the class can invite guests to fill the remaining seats on the bus. Write and solve an equation to find the number of guests g the class can invite.
- 19.** A plumber charges \$30 per hour and \$42 for each hour of overtime. For a job, the plumber works 3 regular hours, h overtime hours, and charges \$195 for new parts. The total amount of the bill for the job is \$390. Write and solve an equation to find the number of overtime hours the plumber worked.